14. (Amended) A process for producing a rate earth metal-based permanent magnet, comprising the step of forming a metal oxide film containing carbon on the surface of a magnet by a sol-gel coating process, thereby forming, between said metal oxide film and the entire surface of said magnet, an interfacial layer with R (rare earth element) atom chemically bonded with a film forming metal atom through oxygen atom.

Please add new claims 16 and 17 as follows:

16. (New) A process for producing a rare earth metal-based permanent magnet according to claim 9, wherein the content of carbon is in a range of 50ppm to 1,000ppm.

17. (New) A process for producing a rare earth metal-based permanent magnet according to claim 14, wherein the content of carbon is in a range of 50ppm to 1,000ppm.